

Ciliary Neurotrophic Factor, His Tag, human recombinant (rHuCNTF-His)

Catalog No: 97048 Lot No: XXXXX Source: E. coli

Synonyms: HCNTF, CNTF, Ciliary Neurotrophic Factor

Background

CNTF is a polypeptide hormone whose actions appear to be restricted to the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. The protein is a potent survival factor for neurons and oligodendrocytes and may be relevant in reducing tissue destruction during inflammatory attacks. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, but this phenotype is not causally related to neurologic disease. In addition to the predominant monocistronic transcript originating from this locus, the gene is also co-transcribed with the upstream ZFP91 gene. Co-transcription from the two loci results in a transcript that contains a complete coding region for the zinc finger protein but lacks a complete coding region for ciliary neurotrophic factor. CNTF is a survival factor for various neuronal cell types. Seems to prevent the degeneration of motor axons after axotomy.

Description

Ciliary Neurotrophic Factor human recombinant produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 220 amino acids and having a molecular mass of 25 kDa. The CNTF protein is fused to His Tag at N-terminus and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless clear solution.

Formulation

The CNTF His tag protein solution (1 mg/ml) contains 20 mM Tris buffer pH 8 and 1 mM DTT.

Stability

CNTF his tag fusion protein, although stable at 4°C for 1 week, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

MGSSHHHHHH SSGLVPRGSH MAFTEHSPLT PHRRDLCSRS IWLARKIRSD LTALTESYVK HQGLNKNINL DSADGMPVAS TDQWSELTEA ERLQENLQAY RTFHVLLARL LEDQQVHFTP TEGDFHQAIH TLLLQVAAFA YQIEELMILL EYKIPRNEAD GMPINVGDGG LFEKKLWGLK VLQELSQWTV RSIHDLRFIS SHQTGIPARG SHYIANNKKM

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